

We Claim:

1. A method of treating a kidney disease comprising administering an effective amount of a soyasaponin B_b to an animal in need thereof.
- 5 2. A method according to claim 1 wherein the kidney disease is polycystic kidney disease.
3. A method according to claim 2 further comprising administering an
10 effective amount of soyasaponin B_a and/or soyasaponin B_c.
4. A method according to claim 1 wherein the soyasaponin B_b is given in an amount from about 1 to about 10 g/day.
- 15 5. A pharmaceutical composition for use in treating a kidney disease comprising an effective amount of a soyasaponin B_b in admixture with a suitable diluent or carrier.
6. A pharmaceutical composition according to claim 5 further including
20 soyasaponin B_a and/or soyasaponin B_c.
7. A nutraceutical composition for use in treating a kidney disease comprising an effective amount of a soyasaponin B_b in admixture with a suitable diluent or carrier.
- 25 8. A nutraceutical composition according to claim 7 further including soyasaponin B_a and/or soyasaponin B_c.
9. A method of isolating soyasaponin B_b from a sample comprising:
30 (a) solubilizing the sample in acidified aqueous alcohol;
(b) removing polar lipids by liquid chromatography;

- (c) solubilizing the sample from (b) in aqueous alcohol;
- (d) passing the sample from (c) through an anion exchange column;
- (e) eluting the sample absorbed to column in (d) with an acidified aqueous alcohol; and
- 5 (f) purifying the sample from (e) by liquid chromatography and collecting fractions containing soyasaponin B_b.

10 10. A method according to claim 9 wherein the starting sample is soy molasses.

11. A method according to claim 9 wherein the sample is solubilized in step (c) in 50-80% ethanol.

12. A method according to claim 9 wherein the acidified aqueous
15 alcohol is 80% ethanol with 5% formic acid.

13. A method according to claim 9 wherein the sample is purified in step (f) by passing the sample through a preparative hydrophobic interaction chromatographic column.

20 14. A method according to claim 13 wherein the preparative hydrophobic interaction column is hexadecyltrimethylammonium-substituted SP Sepharose.

25 15. A method according to claim 9 wherein the soyasaponin B_b isolated from step (f) is further purified by preparative liquid chromatography.

16. A method according to claim 1 wherein the soyasaponin B_b is obtained by a method comprising:

- 30 (a) solubilizing the sample in acidified aqueous alcohol;
- (b) removing polar lipids by liquid chromatography;

- (c) solubilizing the sample from (b) in aqueous alcohol;
- (d) passing the sample from (c) through an anion exchange column;
- (e) eluting the sample absorbed to column in (d) with an acidified aqueous alcohol; and
- 5 (f) purifying the sample from (e) by liquid chromatography and collecting fractions containing soyasaponin B_b.

17. A pharmaceutical composition according to claim 5 wherein the soyasaponin B_b is obtained by a method comprising:

- 10 (a) solubilizing the sample in acidified aqueous alcohol;
- (b) removing polar lipids by liquid chromatography;
- (c) solubilizing the sample from (b) in aqueous alcohol;
- (d) passing the sample from (c) through an anion exchange column;
- (e) eluting the sample absorbed to column in (d) with an acidified aqueous alcohol; and
- 15 (f) purifying the sample from (e) by liquid chromatography and collecting fractions containing soyasaponin B_b.

18. A nutraceutical composition according to claim 7 wherein the soyasaponin B_b is obtained by a method comprising:

- 20 (a) solubilizing the sample in acidified aqueous alcohol;
- (b) removing polar lipids by liquid chromatography;
- (c) solubilizing the sample from (b) in aqueous alcohol;
- (d) passing the sample from (c) through an anion exchange column;
- 25 (e) eluting the sample absorbed to column in (d) with an acidified aqueous alcohol; and
- (f) purifying the sample from (e) by liquid chromatography and collecting fractions containing soyasaponin B_b.